POSTER ABSTRACT for

The World Health Care Innovation and Technology Congress

Poster Title: **Effectively using a Citywide or Metro-Wifi Network for Telemedicine and Telehealth**
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Abstract:

Situation: Many cities/municipalities such as Philadelphia and San Francisco are either installing or planning to install wide area WiFi internet networks (Metro-wifi). Typically, these networks are offered as "residential, general purpose" Internet access services. However care-giver organizations are now looking at using these networks to provide telemedicine, tele-health applications for in-home patient monitoring.

Complication: Key issues such as privacy, security, reliability and coverage may not be consistent with medical industry standards. Further, the viability of these services will require certain levels of uniform quality of service and near-universal coverage to be fully effective.

Question: How should these offerings be designed and managed to ensure that they deliver the quality and integrity of service that is required for these applications?

Answers: 1) Telemedicine applications cannot be treated as normal Internet Services such as surfing the web and email:
- Privacy issues mandate that patient information must be secured
- The communications infrastructure must be built to ensure a high Quality of Service level
- Coverage must be uniform and nearly ubiquitous, including in-premise coverage

Telemedicine Applications have unique requirements – they must be designed and used accordingly

2) Provider supported Service Level Agreements (SLA's) must be established to gain the confidence needed to rely on these networks for patient monitoring
- Applications must be designed to manage and mitigate any service voids
- Patients and care-givers must become comfortable with the technology, it's application and potential limitations

The service must be managed and fully supported by the provider- the application is dependent on the network

3) Provider engagement is necessary to achieve success
- Early pro-active and mutual involvement to define the requirements during the system design phase
- Service level agreements must be defined and managed
- On-call service and support must be uniquely provisioned

A relationship with infrastructure providers is required to ensure objectives are met – collaboration can avoid surprises

4) The solution requires the mutual collaboration and support of many parties
- Physicians must endorse and use these methods
- Care-givers must be comfortable and included in the process
- Insurance carriers must accept this as a viable alternative health service
- Patients need to understand the benefits and limitiations
- Equipment designs must be simple and reliable

Alignment of stakeholders requires collaboration and value realization – a balanced scorecard method can help in the process

The poster will:
- *Identify key markets where Metrio-wifi is being considered or implemented,*
- *The types of instrumentation and monitoring devices suitable for this and a*
- *Key issues for healthcare providers and insurers to consider.*